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The efficacy of emotional regulation on the aggression of epileptic girls (14-18) in Isfahan

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Abstract

In order to administer this study 30 epileptic girls, were selected, via random cluster sampling method. The design was comparative experimental and control group in pre-test, post test and after 3 month follow-up. Training based on Boston Program University. The instrument was SCL_90_R scale. Data was analyzed by Covariance analysis. mean scores of Aggression, in the post test and follow-up was significantly lower in the experimental group than in the control group ($P < 0.001$). The results showed that emotional regulation effects on reduction of Aggression of epileptic girls.

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Key words: emotional regulation, epileptic, Aggression

1. Introduction

Emotion regulation has been conceptualized as processes through their emotions and effect consciously and non consciously (Bargh & Williams, 2007; Rottenberg & Gross, 2003) to appropriate respond to environment demands (Campbell, Sills & Barlow, 2007). In another study, Aldao and colleagues (2010), this may indicate that presence of a maladaptive emotion-regulation strategy is more deleterious than the relative absence of adaptive emotion-regulation strategies. The exception may be problem solving; not having a strong problem-solving orientation may have wide-ranging negative effects on well-being, and open the door for the development of maladaptive emotion-regulation such as rumination, avoidance and suppression. (Aldao, Nolen-Hoeksema, Schweizer, 2010). The aim of most of the studies is to investigate of emotion and the consequences of the emotional regulations on the behavior and cognition (Gross, 1998a). The reviews of the texts and the psychological studies show that the emotional regulation is an important factor for social interactions and in mental health (Cicchetti, Ackerman, Izard (1995). Epilepsy was defined in 2005 by the International League Against Epilepsy as a disorder of the brain characterized by an enduring pre-disposition to generate epileptic seizures and by the neurological, psychological, cognitive and social consequences of this condition (Reynold, Fletcher, 2009). On average, the most accurate estimates suggest that the prevalence is around 5 per 1000, meaning that in a city of 1,000,000 there would be 5000 individuals with seizures. With 6.6 billion individuals in the world, approximately 33 million will have epilepsy. Some estimates are as high as 50 million (Reynold, Fletcher, 2009). Epilepsy, can influence all the aspects of the patient's natural life

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and like all other chronic diseases; it can lead to the psychological reactions, such as, regression, denial, anxiety, depression, and aggression. this reactions, it helps the patient to get along with the new situation and adapt to it, but if these reactions are continued and if they are fixed in the patient, then it should be followed and studied with a special care.

2. Method

Statistical Population, Samples, and Data Collection:
The present study involves a kind of half- experience and its design is as selecting two groups (the experimental and the control groups), as well as a three- stage process of pre-test, post-test and following the results (for 3 months). The statistical population includes the girl adolescence in the age range from 14 to 18(all recognized with epilepsy by the neurologists, and electroencephalography) in Isfahan in 2011. data collecting method is available. The samples of this research include 30 clients refered to the epilepsy center in Isfahan, Al-zahra hospital, and also the neurologists' and doctors' offices, who were all confirmed to participate at this research, and then they were divided randomly in two degrees of the experimental and the control groups. The criteria to enter this research were as the following:

1. Female sex
2. An age range of 14-18
3. Being afflicted with epilepsy based on the neurologists' recognitions and EEG (electroencephalography).
4. At least, 6 months should have passed after the first recognition of epilepsy attacks to them, and they should have begun taking medical treatment, and the level of the diseases should be under control.
5. All the participants must have at least a diploma or an upper degree.

The exiting criteria from this research were as the following:

1. Mental retarded
2. The patients with psychological disorders

3. Instruments

SCL-90-R questionnaire: This test is a self-assessment instrument, including 90 questions, mostly covered in self-assessment questionnaires. This test evaluates the psychological symptoms in 9 dimensions including: Somatization, Obsessive- Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Aggression, Phobic, Paranoid, Psychotism. Some of the questions of SCL-90-K are considered and asked as extra questions. They include a wide range of questions aiming the symptoms common between most of the patients with psychological problems. Most often, the answer to this test takes 10-15 minutes and the answer to each question is rated from "never ever" to "almost always". This test was first confirmed in Iran by Mirzaei in 1981. The validity and the reliability of the questionnaire was surveyed and verified in and out of the country (Beh Kish, 1994).

4. The Performance Method

The interference or the balance method based on the instructions provided by Boston University(Allen, Mc Hugh & Barlow,2009), and the Iranian researcher provided the format of the session after the Persian translation and adjusting it with the Iranian culture, it was applied on the experimental group. The excitement balance training is performed in twelve ninety-minute training sessions for the testes in the experimental group. The work method and the sessions' separation are represented in table1.

Table1 :

Session	the subject of the sessions
Session1	<p>Topic: Introducing the Emotion Regulation</p> <p>agenda: 1. The session instructions: It includes introducing and familiarity with the members of the group.</p> <p>2. Stating the group rules and purposes.</p> <p>3. Introducing the periods and the need to adjust excitement assignments.</p> <p>Adjustment :The group members should take notes from their aims of entering the sessions.</p>
Session2	<p>Topic: 1. Normal Emotion and problematic excitement</p> <p>2. Emotion self-consciousness</p> <p>agenda: 1. Training and introducing Emotion</p> <p>2. Identifying and naming and labeling the sensations.</p> <p>3. Distractions between the various Emotion</p> <p>4. Identifying the emotion in physical and psychological status</p> <p>5. The success causes in Emotion Regulation</p> <p>Adjustment: Identifying most of the sensations and the emotion they experience in every day relationships.</p>
Session3	<p>Topic: disease emotion and the treatment necessity.</p> <p>agenda: 1. cognitive consequences of the emotion reactions.</p> <p>2. The physiologic consequences of the emotion reactions.</p> <p>3. The behavioral consequences of the emotion reactions and the relationship between these three items.</p> <p>Assignment: completion of the self-Monitoring form.</p>
Session4	<p>Topic: The emotional disorder symptoms and the proper treatment and the causes of the emotional disorders.</p> <p>agenda: 1. Introducing the physical symptoms and the behavioral or recognition symptoms.</p> <p>2. Introducing the psychological treatment (cognitive-behavioral)</p> <p>3. Genetics and the environment and the affectability of the people from these two items.</p> <p>Assignment: completion of the self-Monitoring form.</p>
Session5	<p>Topics: 1. Introducing two common cognitive errors.</p> <p>2. Introducing and rejecting s the emotional disorder criteria.</p> <p>Assignment: completion of the self-Monitoring form.</p>
Session6	<p>Topics: The emotional disorder survey.</p> <p>agenda: 1. Getting aware of the relation between the emotion and the behavior, excitement and thought.</p> <p>2. Identifying and surveying the automatic thoughts.</p> <p>Assignment: completion of the self-Monitoring form.</p>
Session7	<p>Topic: Interpretations.</p> <p>agenda: Getting aware of the relation between the automatic thoughts, interpretations, and behaviors.</p> <p>Assignment: completion of the self-Monitoring form.</p>
Session8	<p>Topic: Alteration and correction of the interpretations.</p> <p>agenda: flexibility in interpretations and considering the ranges of probability.</p> <p>Assignment: completion of the self-Monitoring form.</p>
Session9	<p>Topic: The behaviors resulted from emotion</p> <p>agenda:</p> <p>1. Getting aware of the emotional rejection consequences</p> <p>2. Getting aware of or experiencing the emotion experiences or the emotion suppression.</p> <p>Assignment: completion of the self-Monitoring form.</p>
Session10	<p>Topic: 1. Internal facing 2. Facing the emotion</p> <p>agenda: 1. emotion and focusing on the physical sessions.</p> <p>2. Paying a precise attention to all the hindrances and the rejecting behaviors.</p> <p>3. New interpretation</p> <p>4. Re-assessment</p> <p>Assignment: completion of the self-Monitoring form.</p>
Session11	<p>Topic: Hypothesis and the principles and the core belief</p> <p>agenda: 1. Introducing the beliefs related to rejection</p> <p>2. Introducing the beliefs related to misery</p> <p>3. Identifying the core beliefs</p> <p>Assignment: completion of the self-Monitoring form.</p>
Session12	<p>Topic: Altering the core beliefs</p> <p>agenda: Breaking the core problematic beliefs and replacing them with the new beliefs.</p> <p>Assignment: completion of the self-Monitoring form.</p>

5. Results

In table2, the descriptive data related to the aggression scores will be observed in 3 stages of pre-test, post-test and follow up .

Table 2: comparing the mean and the Std Error scores of aggression in pre-test, post-test and follow up

Sub-scale	group	Pre test		Post test		follow up	
		mean	Std.Error	mean	Std.Error	mean	Std.Error
aggression	azmayesh	3/46	0/30	2/26	1/03	2/53	2/06
	control	5	0/64	5/20	2/95	4/53	2/47

comparing the mean and the std error of pre-test, post-test scores of Aggression, in the post test was lower in the experimental group than in the control group. The results also showed that the mean scores of Aggression, in the follow - up was lower in the experimental group than in the control group. and we used Mancova covariance analysis, to determine the effect of Emotion Regulation on the aggression.

Table3: the covariance analysis of the aggression in experimental and control groups in the post-test stage.

Sub-scale		Sum of squares	df	Mean square	F	sig	Partial Eta Squared	Observed Power
Pre test	aggression	51/05	1	51/05	17/73	0/001	0/396	0/982
group	aggression	120/78	1	60/39	20/97	0/001	0/608	1/000

The results of table3, showed that significant difference between the experimental and the control groups in the sub-scales of aggression in post-test ($p < 0.001$).

Table4: the covariance analysis of the aggression in experimental and control groups in the Follow up stage.

Sub-scale		Sum of squares	df	Mean square	F	sig	Partial Eta Squared	Observed Power
Pre test	aggression	12/57	1	12/57	3/91	0/063	0/179	0/465
group	aggression	108/78	1	67/39	17/97	0/001	0/602	0/53

The results of table3, showed that significant difference between the experimental and the control groups in the sub-scales of aggression in follow-up ($p < 0.001$).

6. Discussion and Conclusion

The findings of this research indicated that there was significant difference between in experimental and control groups in pre-test and post-test stages. It means that training the emotional regulation can decrease aggression in experimental group. To generalize the results of the present study, one may say that one of the reasons of the efficiency of the emotional regulation training on the sub-scale of the aggression in post-test, and follow up stages is that Epileptic is a chronic neurologic disorder which lasts for a long-term and makes the patients consume anti-Epileptic medicines. Some of the consequences of theses medicines can be the aggressive and impulsive behaviors. Aggression, and violence, as behaviors under the influence of the inappropriate social- familial conflicts and the drug consumption are prevalent among these individuals and they are often due to the inappropriate behaviors of the companions of the patients. By the initiation of the first Epilepsy attack and the repetition of these attacks, some alterations appear at various personal, affective, behavioral, occupational, familial and social fields, all of which are due to the factors appearing from the label of being an epileptic individual. A last, the continuation of these

approaches and labels lead to the conflicts, the behavioral, psychological, affective, and cognitive disorders, and as a result it leads to the conflicts and disorders in the relations. Through training the emotion regulation in the experimental group, individuals problem solving and proper relationship with their companions.

The issues can lead to decreasing the level of aggression in the epileptic patients. Through training and changing the patient's interpretation of the events, one may control the patients' aggression which might be highly due to their misconceptions of the events they encounter with. This issue leads to decreasing the level of aggression in the testes at the two stages of the post-test and follow up. Regarding the characteristics and the special properties of the adolescence, as well as, considering the fact that most of these patients have conflicts and disorders in interaction with themselves and others, one may say that training the emotional aggression techniques can control their aggression level to a great deal. In this way, the trainees learn that emotion expression can be an adoptive process, in a way that the least harm is made to the individual and the one with whom they have an interaction.

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